



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/763,708

01/22/2004

Takayuki Nishimura

6453P033

7652

8791 7590 04/10/2007  
BLAKELY SOKOLOFF TAYLOR & ZAFMAN  
12400 WILSHIRE BOULEVARD  
SEVENTH FLOOR  
LOS ANGELES, CA 90025-1030

EXAMINER

CASCHERA, ANTONIO A

ART UNIT

PAPER NUMBER

2628

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

3 MONTHS

04/10/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/763,708	Applicant(s) NISHIMURA ET AL.	
	Examiner Antonio A. Caschera	Art Unit 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6,8,12,14,15,17,19,21,25,27,29,31,32 and 34-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6,8,12,14,15,17,19,21,25,27,29,31,32 and 34-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in the pending application.

### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1, 2, 4, 6, 8, 12, 25, 27, 29, 31, 32 and 35-38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In reference to claims 1, 12 and 25, the language of the claims raise questions as to whether the claims (claims 1, 12, 25 and all of their dependent claims, respectively) are directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. Specifically, the “method for reversibly converting a data format...” as disclosed in claims 1, 12 and 25, is the abstract idea, which could be implemented without the use of any type of machine and does not produce any tangible result(s). The Applicant has amended the claims to include the limitation reciting compression and seems to believe that such language overcomes the 35 USC 101 rejection. The Office disagrees as simple forms of data compression may still be performed without the use of a machine. See MPEP 2106 IV (B)(1) and 2106.01 [R-5].

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 2, 4, 6, 8, 12, 14, 15, 17, 19, 21, 25, 27, 29, 31, 32 and 34-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In reference to claims 1, 12, 14, 25 and 34, claims 1, 12, 14, 25 and 34 recite the limitation "...wherein determining each component value of one of the first and second color spaces" in the last 3 lines of claim 1, for example. There is insufficient antecedent basis for this limitation in the claim. Although the claims recite the color spaces to comprise of three primary colors of lights, there is no mentioning of specific component values in the color spaces.

In reference to claim 37, the claim comprises the variable "D" within the formula of the claim which is not clearly defined by claim and no value or range of values is specifically set thereto. Therefore, the claim is deemed indefinite for failing to particularly claim such subject matter.

***Claim Objections***

4. Claims 35 and 38 are objected to because of the following informalities:
  - a. Claim 35 comprises a "Cr = ..." limitation which is not legible due to the spacing of characters (see especially the last few terms of the numerator of the "Cr=" aspect of the equation of claim 35).

Art Unit: 2628

- b. Claim 38 depends upon claim 9, which has been cancelled. An appropriate correction is required so that claim 38 depends upon a pending claim. Further, in view of any type of rejection, the Office will interpret claim 38 dependent upon claim 8.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 14 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Allen (U.S. Patent 6,044,172).

In reference to claims 1, 14 and 34, Allen discloses a method and apparatus for performing color conversions on data that includes a reversible color conversion (see column 2, lines 60-65). Allen discloses the conversions to include a compression stage which occurs after a first color transformation/conversion (see Figure 2). Allen discloses the conversion operating upon RGB data and producing YUV data along with performing the reverse conversion (see Figure 1A, “RGB”, “Forward Color Space Converter”, “Color Compression” and “Inverse Color Space Converter,” Figure 2, “Color conversion (from coordinate 1 -> 2)” and “Color conversion (from coordinate 2 ->1),” Figures 3A & 3B and columns 2-3, lines 65-15). Allen also discloses the resolution of RGB data to be represented using 8 bits per RGB while representing such color in a YUV transformed space with 8:9:9 (8 bits for Y, 9 for U and 9 for V) (see column 11, lines

Art Unit: 2628

30-38, column 12, lines 43-48 and Figure 3A). Allen explicitly discloses such YUV data calculated from the differences in RGB values (see column 3, lines 1-15) and therefore the Office interprets such YUV color space as one defined by brightness (Y) and color difference. Allen also discloses performing such reversible color conversion using an integer operation (see columns 2-3, lines 65-3 and column 12, lines 43-48). Lastly, Allen discloses that each YUV data is based upon all three RGB values as Figure 3A shows Y output data being based on R, G, B (via #301, 302 and 307) input data, V output data being based upon R, G, B (via #310, 311 and 303) input data and U output data being based upon the Y output data (which is further based upon R, G, B as previously stated) and R input data (via #308). Further, in reference to claims 14 and 34, Allen also explicitly discloses the apparatus for performing the above techniques as a general purpose computer which comprises a computer readable storage medium for storing a computer program for implementing the method of the above techniques (see column 4, lines 13-36).

### ***Response to Arguments***

6. The cancellation of claim 33 and addition of claims 35-38 are noted.
7. Applicant's arguments, see page 17 of Applicant's Remarks, filed 02/01/07, with respect to the 35 USC 101 rejection of claim 34 have been fully considered and are persuasive. The 35 USC 101 rejection of claim 34 has been withdrawn.
8. Applicant's arguments, see page 17 of Applicant's Remarks, filed 02/01/07, with respect to the objection of claims 2, 4, 6, 17 and 19 have been fully considered and are persuasive. The

Art Unit: 2628

objection of claims 2, 4, 6, 17 and 19 has been withdrawn since minor informalities have been corrected for.

9. Applicant's arguments, see pages 17-18 of Applicant's Remarks, filed 02/01/07, with respect to the rejection(s) of claim(s) 1, 2, 4, 6, 8, 14, 15, 17, 19, 21, 27, 29, 33 and 34 under 35 USC 102(e), in view of Bezryadin, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Allen.

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Antonio Caschera whose telephone number is (571) 272-7781.

Art Unit: 2628

The examiner can normally be reached Monday-Thursday and alternate Fridays between 7:00 AM and 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung, can be reached at (571) 272-7794.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**571-273-8300 (Central Fax)**

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (571) 272-2600.

aac

*AM*  
3/31/07

**Antonio Caschera**  
Patent Examiner



KEE M. TUNG  
SUPERVISORY PATENT EXAMINER